Public health guidance

Scientists call for better public health guidance about how coronavirus spreads in air
Viruses in aerosols smaller than 100 microns can remain airborne in a confined space for prolonged periods of time (The Tribune: 2020107)


Scientists call for better public health guidance about how coronavirus spreads in air
Viruses in aerosols smaller than 100 microns can remain airborne in a confined space for prolonged periods of time

Scientists have published an open letter calling for public health officials to make a clear distinction between the spread of the novel coronavirus via droplets ejected by coughing or sneezing, and from aerosols that can carry the virus for much greater distances.

The researchers, including those from the University of California (UC) San Diego and the University of Maryland in the US, called for the scientific community to clarify the terminology used related to aerosols and droplets, and employ a more modern size threshold, rather than the existing one which is based on 1930s-era work.

Viruses in aerosols smaller than 100 microns can remain airborne in a confined space for prolonged periods of time, and accumulate in poorly ventilated air, leading to transmission, they wrote in the letter, published in the journal Science.

"The balance of attention must be shifted to protecting against airborne transmission," said the group, led by Kimberly Prather from UC San Diego.

Viruses in aerosols can remain suspended in air for many seconds to hours, like smoke, and be inhaled, the scientists noted in the letter.
"They are highly concentrated near an infected person, so they can infect people most easily in close proximity. But aerosols containing infectious virus can also travel more than two metres and accumulate in poorly ventilated indoor air, leading to superspreading events," the researchers noted.

In addition to mask wearing, social distancing and hygiene efforts, they urged for public health officials to articulate the importance of moving activities outdoors, improving indoor air using ventilation and filtration, and improving protection for high risk workers.

"The goal of this letter is to make it clear that the SARS-CoV-2 virus travels in the air and people can become infected via inhalation," Prather said.

"It is important to acknowledge this pathway so efforts can focus on cleaning the air and providing guidance on how to avoid risky indoor settings," he added.

According to the scientists, it is important for people to wear masks at all times in public buildings and confined spaces, not only when they can't maintain social distance.

"This isn't just an academic question, but a point that will help reduce transmission if public health officials offer clear and forceful guidance about this," said Linsey Marr, a co-author of the letter from Virginia Tech in the US. — PTI

Active cases only 13.75 pc of total COVID-19 caseload

India continues to report a steadily declining trend of percentage of active cases (The Tribune: 2020107)


Active cases only 13.75 pc of total COVID-19 caseload
So far 56,62,490 people have recovered from the disease in the country and exceed active cases of coronavirus infection by 47,43,467 as on date. Tribune photo.

India's 9,19,023 active cases of COVID-19 constitute "merely" 13.75 per cent of the total caseload as on date and the country continues to report a steadily declining trend of percentage of active cases, the Union Health Ministry said on Tuesday.

So far 56,62,490 people have recovered from the disease in the country and exceed active cases of coronavirus infection by 47,43,467 as on date, it stated.

"The declining trend of the percentage of active cases is commensurately supported by the rising percentage of recovered cases," the ministry underlined.
The higher number of recoveries has aided the national recovery rate to further improve to 84.70 per cent, the ministry said.

A total of 75,787 people have recovered from COVID-19 and discharged in a span of 24 hours whereas 61,267 new infections were reported during the same period, according to the data updated at 8 am.

The new recoveries have exceeded the new confirmed cases in 25 states and UTs, the ministry highlighted.

Seventy-four per cent of the new recovered cases are concentrated in 10 states and UTs -- Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, Kerala, Uttar Pradesh, Odisha, Delhi, Chhattisgarh and West Bengal, the ministry said.

Maharashtra alone has contributed the maximum with nearly 13,000 single-day recoveries.

The ministry said that 75 per cent of the 61,267 new confirmed cases recorded in a span of 24 hours are from 10 states and UTs.

Maharashtra continues to be the State reporting a very high number of new cases with more than 10,000 cases followed by Karnataka with more than 7,000 cases.

Also, 884 fatalities due to COVID-19 have been reported in a day, of these nearly 80 per cent are concentrated in ten states and UTs of Maharashtra, Karnataka, Uttar Pradesh, Tamil Nadu, West Bengal, Andhra Pradesh, Punjab, Chhattisgarh, Delhi and Madhya Pradesh, the ministry said.

**Covid-19: What you need to know today (Hindustan Times: 2020107)**

[https://epaper.hindustantimes.com/Home/ArticleView](https://epaper.hindustantimes.com/Home/ArticleView)

October is festive season in India, but there’s one more reason to celebrate this year — the end of the first wave of the coronavirus disease.

It’s evident in one of the charts accompanying this 176th installment of Dispatch — a return of the seven-day average of daily cases to levels last seen in early September.

The reasons for this are not clear, and the pattern of daily case numbers is still a bit too volatile for my liking, but the downslope of the curve is clearly there to see. Inadequate testing doesn’t seem to have caused this — the seven-day average of tests conducted every day has continued to rise — although a closer analysis of the break-up between RT-PCR and rapid antigen tests is needed before this can be conclusively said.

There has also been a slight fall in the number of daily deaths and a significant fall in the seven-day average positivity rate (number of people testing positive expressed as a percentage of the number of those tested).
This is the first time that the number of cases of Covid-19 — both daily and seven-day average — has declined consistently for at least a fortnight, perhaps more. Other countries have seen clear first waves (the US has also seen a second, and is now on its third), but, until now, not India. In late August and September, as cases climbed, a few experts erroneously referred to it as the second wave in the country, but as evident from the chart referred to in the first instance, it was merely a continuation of the same upward curve. That has changed — since the third week of September, the seven-day average of daily cases has been on a downtrend. And this, even after accounting for the Monday factor (the number of cases typically sees a dip on account of low testing over the weekend). On October 5, it was 59,980; on September 28, 69,685; on September 21, 74,693; on September 14, 81,801; on September 7, it was 77,816; on August 31, 67,484; and on August 24, 59,051. The pattern is clear.

And so, to repeat what I said at the beginning of this column, it is time to celebrate — cautiously, in a social-distanced way, and with the complete awareness that the curve could go north again, and things south. After all, in both the US and in European countries such as France and Spain, the second wave was stronger than the first in terms of number of daily cases, although the deaths were far fewer.

For much of the first wave, Delhi, Maharashtra and Tamil Nadu accounted for a significant proportion of the infections in the country, although that’s changed in the past few months.

Among these, the trajectory of the pandemic in Delhi shows that the Capital has actually seen two waves and that in Maharashtra shows that the western state, the worst hit by the coronavirus disease in the country, may be seeing the end of its first wave. Maharashtra’s positivity rate is still a bit too high (a seven-day average of 18.7% on Monday) to say this with certainty, but even that number is at least eight percentage points off its recent peaks indicating some sort of turnaround.

Tamil Nadu presents an interesting study though. The number of cases in the state has been on a long (and high) plateau since early August — it isn’t clear why — although its positivity rate seems well under control. The testing in both Delhi and Maharashtra appears to have dropped off a bit, while Tamil Nadu continues to remain a (positive) outlier.

**Delhi’s 2nd Covid wave**

**Delhi’s 2nd Covid wave has already hit its peak: Kejriwal (Hindustan Times: 2020107)**

[https://epaper.hindustantimes.com/Home/ArticleView](https://epaper.hindustantimes.com/Home/ArticleView)

Chief minister says the situation in the national capital is under control; experts caution worst may not be over

A woman fixes her child’s mask at a Covid-19 testing centre in the Capital. AP

With the number of daily new coronavirus disease (Covid-19) cases in the city dropping consistently since its mid-September peak, Delhi chief minister Arvind Kejriwal on Tuesday
said the “second wave” of the infections had already peaked, and the situation in the Capital was under control again.

“The Covid-19 situation in Delhi is under control now. The peak of the second wave of infections was witnessed on September 17, when around 4,500 cases were recorded. With time, the number of fresh cases have gone down even with the high number of tests being done. Similarly, the occupancy of hospital beds that had gone up to about 7,200 has dropped again to 5,500. The occupancy in ICUs has reduced too. I hope we are past the second peak,” said Kejriwal during his visit to a manufacturing plant of crop stubble decomposer in Najafgarh.

On September 17, 4,432 cases of Covid-19 had been reported.

Kejriwal had earlier mentioned the possibility of Delhi already having moving past the peak of the “second wave” of Covid-19 on August 24.

The number of cases of the infection had shot up during the second and third weeks of September. On its peak during what the government said was the “second wave”, the seven-day average of daily cases in Delhi touched a all-time high (so far) of 4,174. This number dropped to 3,960 during the third week of September, after which it now stands at 2,701 as of Tuesday. The Capital added 2,676 cases of Covid-19 on Tuesday, when 53,591 tests were conducted.

Experts said it is better to wait for more data to determine if the so-called second wave has passed.

“The number of cases is definitely coming down, as per the data available in the public domain. However, to say whether this was the second wave of infection and whether we are past it, we will need more detailed data. In epidemiology, a second wave will be when the first wave has subsided to the baseline and has remained low for some time before going up,” said Dr Puneet Mishra, professor of community medicine at the All India Institute of Medical Sciences (AIIMS).

Mishra said it is likely the cases will keep going up and down until herd immunity is developed.

When asked about the outcome of the latest sero-survey (which showed lower prevalence rate of antibodies among people), Kejriwal said the survey was done in a “decentralised” manner and the outcome is related to change in “sample collection method”. He, however, did not elaborate further on this.

The sample collection for the third round of sero-survey conducted in the first five days of September was ward-wise instead of district-wise as in the previous surveys.

The samples were also collected according to the places of residence such as whether the participants were living in planned colonies, unauthorised colonies, or slums. The prevalence dipped to 24.8% from the previous 29.1%.

“The dip could have been because of the change in the sample collection method. There are also some reports of the antibody titers (concentrations) going down over time. However, even if antibody levels go down, people are likely to still have innate immunity from the infection
with very few cases of re-infection. This means Delhi might develop herd immunity soon,” Dr Mishra said.

Coronacases (The Asian Age: 2020107)

39 fatalities in 24 hours, total death count reaches 5,581

AGE CORRESPONDENT
NEW DELHI, OCT. 6

Chief minister Arvind Kejriwal on Tuesday said the national capital is past the peak of the second wave of coronavirus and the situation has been controlled to a large extent.

City, meanwhile, recorded 2,676 new cases and 39 deaths in last 24 hours. Out of total, 2,95,216 patients, 22,720 are active and 2,66,925 are recovered. City death toll due to Covid-19 stands at 5,581. Mr Kejriwal said the Delhi government increased the testing exponentially to detect the infection.

"Delhi hit the peak of the second wave of Covid-19 on September 17 when 4,500 cases were reported across the city. The situation has been controlled to a large extent. I hope the second wave will slowly pass," said Mr Kejriwal.

Testing in Delhi hit the 50,000 a day mark in September compared to 20,000 tests per day in August. The chief minister also said that 10,000 beds are now unoccupied in hospitals. At last count, 7,300 beds were occupied.

According to Delhi government data, 1,947 new cases were reported on Monday, increasing the cumulative count to 2,95,560 cases, while 32 fatalities took the number of deaths to 5,581.

Forty-eight deaths were reported on September 29, the highest in a day since July 16, when the city reported 58 deaths.

On Monday, the case positivity rate was 5.47 per cent, while the cumulative positivity rate was 8.82 per cent. The average death rate for the last 10 days stands at 1.41 per cent.

Experts also concurred that Covid cases have come down in the last few days and that Delhi has crossed the peak of the second Covid wave. "We had a similar experience at the hospital. We had a peak, and then it came down. The number went up again but now we are seeing a decline in admissions. If the numbers persist for a week, we can safely say that we are past the second peak," said Dr Rajesh Chawla, senior consultant, critical care and respiratory medicine at Indraprastha Apollo Hospital.

Dr Nilesh Yadav, medical director of Lok Nayak Jai Prakash Narayan Hospital, said there is certainly a decline in the number of new coronavirus cases as compared to mid-September.

"We can say that the second peak is over now. The number of cases is expected to decrease further," he said, adding that the high number of deaths over the last few days can be attributed to severe patients coming to Delhi for treatment from surrounding states.

Dr BL Sherwal, medical director of Rajiv Gandhi Super Specialty Hospital, said, "We also saw an increase in hospital admissions around September 16-17 when the cases rose. But the number of admissions has decreased now and discharges have increased."

Chief minister Arvind Kejriwal, environment minister Gopal Rai and others visit Bio Decomposer centre at Najafgarh in New Delhi on Tuesday. — PTI

247 new cases in Noida, tally crosses 14,000-mark

Noida, Oct. 6: Uttar Pradesh’s Gautam Buddh Nagar registered 247 new Covid cases on Tuesday, taking the district’s infection tally to 14,113, official data showed.

The district’s active cases count rose to 1,434 from 1,345 on Monday even as 139 more patients were discharged, according to the data released by the UP Health Department for a 24-hour period.

The district has so far recorded 12,673 recoveries, seventh highest in the state, according to the data.

The death toll stands at 66 with a mortality rate of 0.39 per cent, it stated.

As per official figures on Tuesday, the recovery rate of patients in the district dropped slightly to 99.64 per cent from 99.69 per cent on Monday.

There were 44,031 active cases across UP on Tuesday. So far, 5,70,733 patients have recovered across the state, while the death toll linked to Covid climbed to 6,153, the data showed.

Recently, an inspector in Gautam Buddh Nagar succumbed to Covid-19 on Saturday, officials said, recalling his exemplary work as a “frontline warrior” during the coronavirus-induced lockdown.

Amit Kumar Singh, in his 40s, was also heading the Phase 3 police station, the officials said.

"He was admitted to the Sir Gangaram Hospital in Delhi for Covid-19 treatment. He was admitted to the ICU (intensive care unit) where he passed away on Saturday morning," according to a police statement.

The Gautam Buddh Nagar Police said Singh was a “dedicated, disciplined, well behaved and popular” policeman.

— PTI
Over 65% of beds for Covid-19 patients vacant at city hospitals

New Delhi, Oct. 6: With coronavirus cases here witnessing a decline in the last few days, over 65 per cent of beds for Covid patients in the city hospitals are vacant, data on Delhi Corona app showed.

However, the bed occupancy is higher in private hospitals as compared to government-run facilities.

At the LNJP Hospital, which is the Delhi government’s biggest Covid facility, 1,545 of 2,000 beds are vacant, while the GTB Hospital has a vacancy of 1,321 beds against its strength of 1,506, according to Delhi Corona app.

Indraprastha Apollo Hospital has 110 out of 300 beds vacant, while only 53 out of 250 beds are unoccupied in Max Smart Saket. At Sir Gangaram Hospital, 60 beds are vacant out of 290 beds earmarked for Covid patients.

Out of the total 15,822 beds for Covid patients in Delhi, only 5,402 are occupied, according to the Corona app, which provides the latest details about the availability of beds and ventilators in the city hospitals.

Also, 561 of 1,321 Covid ICU beds with ventilators are occupied, accounting for over 42 per cent of which 383 are vacant. He said nearly 90 patients are in ICU. Indraprastha Apollo Hospital’s Dr Rajesh Chawla said private hospitals are seeing more occupancy as people, who can afford treatment there, prefer them over government facilities. “We had a peak and then it came down and then it went up but now we are seeing a decline in admissions,” he said.

Dr Mugdha Tadviya, senior consultant, internal medicine, Fortis Hospital Vasant Kunj, said there was a time when it was very difficult to find beds in hospitals but now the situation has become a little better.

“The ICU beds are still occupied because once the patient goes in the ICU, they take time and if they go on a ventilator, the recovery takes more. Sometimes, it takes 10-15 days and sometimes even months. There is no movement from the ICU to the outside that is why it is difficult to get ICU beds,” she said.

All seven Covid ICU beds with ventilators at the hospital are occupied, while 12 out of 28 ICU beds without ventilators are vacant, according to Delhi Corona app. — PTI
Vanquishing viruses

Vanquishing viruses: On Nobel Prize for medicine (The Hindu: 2020107)

The Nobel Prize for Medicine is an inspiration to researchers working on SARS-CoV-2
At a time when the world is faced with multiple assaults from a frighteningly obscure virus, it
cannot be mere coincidence that the Nobel Committee decided to anoint three scientists who
peeled the layers off another virus that confounded generations of physicians — the Hepatitis
C virus (HCV). The 2020 Nobel Prize in Physiology or Medicine, to Harvey J. Alter, Michael
Houghton and Charles M. Rice, is a stout endorsement of years of work that went towards
identifying one of the world’s greatest scourges. But to see it shorn of the context it is couched
in would be to miss the larger point or purpose it could serve. Choosing researchers who went
after a pathogen, and succeeded in unraveling the whole puzzle at a time when others are
fighting fatigue in a daily battle against the SARS-CoV-2 virus, is also a hat tip to the
virologists and geneticists burning the midnight oil, for over nine months now.
Plan is to digitally track procurement, storage, distribution and administration on real-time basis
The Union Health Ministry said on Tuesday that it was expecting COVID-19 vaccine supplies to be available from early next year.

Most patients who are consulting cardiologists in fact need counselling, says doctor
A pounding heart — giving the sense of an imminent heart attack or other cardiac problems — is making people consult specialist doctors through video calls. Cautioning that only detailed examinations and diagnostic reports can help doctors diagnose the actual cause of the problem, a cardiologist said that stress and anxiety, triggered by various reasons, could give a sense of an abnormal heart rhythm.
Patients who saw a pain medicine specialist via telemedicine saved time and money and were highly satisfied with their experience, even before the Covid-19 pandemic, say researchers.

The study, presented at the recent ANESTHESIOLOGY 2020 annual meeting, verified that many chronic pain patients are confident they will receive good care via telemedicine while avoiding lengthy commutes and time in traffic.

"This era of contactless interactions and social distancing has really accelerated the adoption of telemedicine, but even before the pandemic, patient satisfaction was consistently high," said study lead author Laleh Jalilian from the University of California, Los Angeles (UCLA) in the US.

According to the researchers, patients who are being evaluated for new conditions may be better off having office visits initially.

"But once patients establish a relationship with providers, follow-up visits can occur efficiently with telemedicine, while maintaining patient rapport and quality outcomes. We believe 50 per cent of our visits could be conducted via telemedicine," Jalilian said.

In the study, the researchers offered patients the choice of an in-office or telemedicine visit via secure video meetings or telephone calls 1,398 patients chose telemedicine and were seen via 2,948 virtual appointments over a period of seven months.

Researchers determined that patients who opted for virtual visits avoided a median roundtrip driving distance of 26 miles and saved a median 69 minutes in traffic per trip, and a median of $22 on gas and parking per visit.

They also saved a median of $156 over the course of a median of three visits by avoiding the driving time and parking costs.

Of the 327 patients who completed surveys, 92 per cent said they were satisfied with their experience.

The researchers said that for the adoption of telemedicine to be sustainable for pain clinic practices, policymakers should consider expanding reimbursement to encourage its use and create payment models that take into account the additional work required to offer telemedicine visits.
"Now that telemedicine is more widespread, it may become a valued part of care delivery in chronic pain practices," said Jalilian.

"We hope it will encourage policymakers and insurance providers to continue to support these platforms and inspire more innovation in this developing field of research and patient care," the study authors wrote.

**Influenza vax**

**Influenza vax may provide roadmap to prevent Covid-19: Study (New Kerala: 2020107)**


Seasonal influenza vaccine development and mass production may lead to future efforts targeted at developing and evaluating vaccine strategies for Covid-19, say researchers.

In the study, published in the Journal of the American College of Cardiology, the research team evaluated whether existing flu trial networks could offer primary and secondary prevention strategies for patients with cardiovascular disease at risk of complications from Covid-19.

The World Health Organisation (WHO) estimates that influenza kills as many as 6,50,000 people every year globally, citing influenza as a top 10 leading cause of death among people of all ages, especially those with one or more comorbidities like cardiovascular disease.

Furthermore, seasonal influenza epidemics have been associated with population-level increases in cardiovascular hospitalisation and mortality.

For these reasons, clinical guidelines recommend the general population receive their flu vaccination annually to reduce the risk of influenza-like illness, with high-risk individuals the most urged to get vaccinated.

Research has shown that viral respiratory infections such as seasonal influenza and Covid-19 are risk factors for cardiovascular disease.

Patients with cardiovascular disease are also at a higher risk of complications following viral respiratory infections, including increased morbidity, mortality and health care utilization.

Current data suggests influenza infection and the novel coronavirus share similar symptoms at the outset, primarily fever, cough and shortness of breath. However, Covid-19 appears to be more contagious than the flu.
"Although Covid-19 and other respiratory virus infections are associated with acute myocardial infarction and other cardiovascular events, influenza has the best evidence of a safe vaccine option for cardiovascular risk reduction to date," said study author Jacob A. Udell from the University of Toronto in Canada.

Several observational and small, randomized studies have suggested that influenza vaccination may serve as a preventative measure against adverse cardiovascular outcomes.

However, despite international guidelines recommending routine influenza and pneumococcal vaccination for patients with cardiovascular disease, uptake is substantially lacking and often deprioritised, including at the time of cardiovascular hospitalisation.

There are currently three international cardiovascular outcome trials examining the cardioprotective effects of different influenza vaccine formulations, according to the team.

"Three large ongoing influenza vaccine cardiovascular outcome trials have an opportunity to contribute further to our understanding of the underlying comorbidities in these patients that may be driving morbidity and mortality associated with Covid-19 infection," Udell said.

"While developing new vaccines, we will also definitively learn soon whether influenza vaccination is an effective, low-cost, widely available therapy that reduces cardiovascular risk, which may further help prevent fatal and nonfatal cardiovascular complications of Covid-19," Udell noted.

Mental health

Covid-19 taking heavy mental health toll on people: Study (New Kerala: 2020107)

New research has added to the growing body of evidence that the Covid-19 pandemic is taking a heavy mental health toll even on people who are not directly impacted by the disease.

The study, published in the journal Frontiers in Psychiatry, found that people in countries with low rates of infection and fatalities -- like Australia at the onset of the pandemic -- still experience twice as much depression and anxiety.

These outcomes are largely related to financial stress and disruptions in people's social lives.

"We already know from past pandemic research that the people who are most affected, such as those who become ill and/or are hospitalized and their careers affected, experience more severe impacts," said study author Amy Dawel from the Australian National University.

"However, the impacts of Covid-19 on the broader population in relatively less affected countries are also likely to be substantial.
"Our data show that the by-products of Covid-19 are affecting populations broadly and the concern is that countries with strong restrictions, who appear to circumvent the worst of Covid-19, may overlook the indirect impacts of the pandemic," Dawel added.

To capture a snapshot of the population's mental health just after the first Covid-19 restrictions went into effect, the research team surveyed nearly 1,300 Australian adults.

Since the survey occurred in the early stages of the pandemic, only 36 participants reported having received a Covid-19 diagnosis or having a close contact who had been diagnosed.

There were also relatively few people who had been tested, had self-isolated or who had known anyone who had any of these experiences.

Surprisingly, these cases of Covid-19 contact showed no link to mental health impact.

In contrast, financial distress and disruptions in work and social activities were significantly associated with symptoms of depression and anxiety, as well as lower psychological well being. However, working from home wasn't associated with any negative effects.

Higher rates of mental health symptoms were also found among people who were younger, identified themselves as female or who reported having a pre-existing mental health condition.

"We hope that these data highlight that the way countries manage Covid-19 is likely to impact their population's mental health, beyond those most directly affected by the disease," Dawel said.

Recently, a study published in the journal Computers in Human Behaviour found that the excessive use of social media for Covid-19 health information is related to both depression and secondary trauma.

**Health Care Services**

**Hospital safety: Tips for patients while visiting a hospital (New Kerala: 2020107)**


The COVID-19 pandemic continues to grip India, however the lockdown restrictions have been gradually eased up. In the past few months, patients chose to delay non-critical and elective surgeries due to the fear of infection, leaving plenty of lives in peril.

As healthcare front liners continue to battle the pandemic, hospitals are well equipped to tackle a host of other health concerns to deliver high-acuity care. From OPD's to full-fledged hospital services now resumed to normalcy, many patients are still fearful if visiting a hospital is safe
or not, says Dr Anita Mathew, Senior Consultant, Physician iamp; Infectious Disease Specialist, Fortis Hospital, Mulund.

The first and foremost precaution is to maintain social distancing and safety for yourself and others in mind. Follow guidelines issued by governing bodies and medical authorities, and seek medical aid on time. Visit your doctor when necessary, avoid delaying treatment as prolonging an issue may aggravate the condition. Here are a few steps to ensure patients safety right from your doorstep to the hospital and back

Before stepping out make sure to take prior appointments with your doctor. It is strongly advised to do so to avoid queuing up; call the hospital to check if appointments are to be booked online or over the phone. Wearing a mask is mandatory, carry an alcohol-based sanitizer, gloves as well as wet wipes. It is best to carry your own bottle of water from home.

To accompany you to your appointment, it is recommended that only one other healthy person comes along to avoid overcrowding at the center. Those experiencing any symptoms of cough and cold should preferably stay indoors. Pregnant women, older adults and children should refrain from visiting a hospital unless it is of utmost urgency.

For your commute to the hospital, go by your own vehicle if you have one. If you are to take public transport, it is best to pre-book a cab/auto rickshaw along with the person accompanying you. Make sure to sanitize your hands if you have touched any surfaces and avoid touching your face, eyes or mouth at all times while outdoors.

To pay for your transport, go cashless. Digital transactions will minimize the risk of you coming in exchange with paper money while at the hospital, the first thing you should do is ensure at least two feet space between you and another person. There could be a high possibility of you coming in contact with infected people even though hospitals have dedicated wards, it is best to practice social distancing and safety. Wash your hands with soap and water before and after meeting with your doctor.

Even though hospitals adhere to immense sanitation practices, pay attention to protocols recommended by the staff.

For your consultation, carry all necessary health documents and reports to avoid wasting your appointment time. You may write down all the details to be shared with your consultant or the questions you’d wish to ask to avoid any uncertainty or confusion. Share all information pertaining to your medical history or condition for accurate diagnosis and treatment.

If one has symptoms of fever then to go to dedicated fever clinics which is present in most of the hospitals rather than going to the routine OPD. This reduces the risk of COVID-19 to others in the event if one has it.

MUST-ASK QUESTIONS

Discuss the hygiene practices that you follow, at home and in a social setting, check with the doctor if you are missing a crucial hygiene practice that could help prevent contracting the COVID19 infection. Discuss the follow-up appointment, check with the doctor if you could opt for a tele/video consultation over a physical consult at the hospital.
TIPS TO FOLLOW AT THE HOSPITAL

Do not wear mask with valves, these are strictly to be avoided. Opt for a three ply homemade or store-bought mask instead. To make a payment at the hospital, cashless payments are the recommended mode of transaction. For your commute back home, follow the same steps as your commute to the hospital—follow the same safety measures. Once home, take off your shoes at the door, disinfect any door knobs or surfaces you may have touched. Safely dispose off your mask, head to the bathroom and remove your clothes. Add them to warm water with detergent to wash. Take a bath with warm water using soap and scrub thoroughly.

Hospitals are now allowing limited visitation, follow the guidelines and do not breach or create problems, it will only put you at risk. Also, it is important for you to not fear the virus; let your doctor be your guide. Stay cautious, stay safe.

(Siddhi Jain can be contacted at siddhi.j@ians.in)

Diabetes

How diabetes can affect your eyes (New Kerala: 2020107)


Glucose is an essential energy source for all living cells of the human body, which is programmed in a way wherein the glucose levels in the blood are maintained at an optimal level through various hormones.

Blood glucose levels are normally referred to as blood sugar levels in our day to day life. Diabetes is a condition wherein blood glucose levels are abnormally high. Consistently high glucose levels cause damage to various organs of the human body in the long run.

'Diabetic Retinopathy' is one such condition wherein abnormally high blood glucose or blood sugar levels cause slow, progressive and long-standing damage to the eyes.

Diabetes has now assumed the title of a silent global pandemic. With India set to become the diabetic capital of the world, the threat of visual loss due to diabetic retinopathy has gained massive proportions.

To understand how diabetes impacts the eyes, let us first understand the structure of the human eye. The human eye has structures and functions roughly equivalent to those of a simple camera. Similar to the light sensitive Im of a camera, the human eye has a light-sensitive structure called the retina.

It is this retina or the light sensitive structure of the human eye that is most adversely affected by diabetes. This condition is called diabetic retinopathy or is also referred to as diabetic eye disease in common understanding.

The advent of diabetic retinopathy simply starts as the appearance of small bleeding spots or "microaneurysms" on the surface of the retina. This is the initial stage of the disease or non-
proliferative diabetic retinopathy, wherein the vision remains reasonably good despite having an abnormality.

The retinal blood vessels eventually develop leaks that cause the retinal tissue to "swell up like a sponge" (also called macular edema). It is this stage wherein an individual's vision starts getting affected and prompts her to seek medical attention.

Treatments like the application of laser spots to the retina or instilling injections into the eye at this stage are very effective if instituted in time.

If the blood sugar levels continue to remain uncontrolled, the retina suffers from larger bleeding spots and blood may entirely fill up the jelly inside the eye causing a sudden loss of vision. Many patients go undetected until this stage of the disease because they miss undergoing an eye check-up while they suffer from diabetes all these years.

In the later stages of the retina starts getting crumpled and this results in a near-permanent loss of vision and blindness. Major surgery is then required to remove the blood and fix the retina back to its original position. Despite multiple major surgeries, only a few individuals may gain back their original vision.

As the diabetic eye disease progresses through the late stages, the microscopic damage to the cells of the retina leads to permanent structural and functional changes that, unfortunately, cannot be reversed.

Early detection of diabetic retinopathy and early treatment is hence, the key to preventing permanent visual loss due to diabetic eye disease.

It is strongly recommended to get a retina evaluation for every diabetic individual, at least once in a year. This retina evaluation is performed by an eye doctor who is a retina specialist and usually takes about an hour at the doctor's clinic.

Long-standing diabetes, poor blood sugar control, associated hypertension, and deranged lipid profiles are the most important risk factors for the development and progression of diabetic eye disease. Hence, all diabetics must have regular evaluations with the physician.

**HIV drug**


The drug combination lopinavir-ritonavir is not an effective treatment for patients admitted to hospital with Covid-19, according to the results of a study published in the journal The Lancet.
Many clinical care guidelines have recommended lopinavir-ritonavir -- an antiviral medication approved to treat HIV/AIDS -- for the treatment of patients hospitalised with Covid-19. However, these guidelines should now be updated, the research team said.

The Randomised Evaluation of Covid-19 therapy (RECOVERY) trial, underway at 176 UK hospitals, is the first large-scale randomised clinical trial to report the effects of lopinavir-ritonavir in patients admitted to hospital with Covid-19.

"Treatment of Covid-19 with the drug combination lopinavir-ritonavir has been recommended in many countries. However, results from this trial show that it is not an effective treatment for patients admitted to hospital with Covid-19," said study author Martin Landray from the University of Oxford, UK.

"Since our preliminary results were made public on June 29, 2020, the World Health Organization has halted lopinavir-ritonavir treatment groups involved in its SOLIDARITY trial and reported that their interim results are in line with those presented here," Landray added.

According to the study, 1,616 patients in the RECOVERY trial were randomised to receive lopinavir-ritonavir while 3,424 patients received usual care alone.

Those on lopinavir-ritonavir received 400 mg of lopinavir and 100 mg of ritonavir by mouth every 12 hours for 10 days or until discharge, if sooner. The primary outcome was 28-day all-cause mortality.

Findings from the trial indicate that using lopinavir-ritonavir to treat patients hospitalised with Covid-19 does not reduce deaths within 28 days of treatment beginning.

The study revealed that 23 per cent who received lopinavir-ritonavir and 22 per cent allocated to usual care died within 28 days.

"When combined with findings from an earlier, smaller trial and with the WHO interim results, this provides strong evidence that lopinavir-ritonavir is not an effective treatment for patients hospitalised with Covid-19," said study author Peter Horby from the University of Oxford.

"Whilst it is disappointing that there was no significant benefit from lopinavir-ritonavir for patients in the hospital, these findings have allowed us to focus our efforts on other promising treatments, and have informed the way in which individual patients are treated," Horby noted.
आफतः: तच्छा पर नौ घटे तक जिंदा रह सकता है वायरस

राहतः: ज्यादा मास्क पहनने से फेफड़ों को नुकसान नहीं

Vccine (Hindustan: 2020107)

https://epaper.livehindustan.com/imageview_361100_85149002_4_1_07-10-2020_4_i_1_sf.html
खुशखबरी: साल के अंत तक आ सकता है टीका

जिनेवा | एजेंसी

विश्व स्वास्थ्य संगठन (डब्ल्यूएचओ) के प्रमुख टेड्रोस अदनोम घोबियस ने कहा है कि कोविड-19 वैक्सीन इस साल के अंत तक तैयार हो सकती है। उन्होंने वैक्सीन के उपलब्ध होने पर समान वितरण सुनिश्चित करने के लिए सभी नेताओं के बीच एकजुटता और राजनीतिक प्रतिबंधता का आह्वान किया।

टेड्रोस ने डब्ल्यूएचओ के कार्यकारी बोर्ड की बैठक में कहा कि हमें वैक्सीन की जरूरत होगी और आशा है कि इस वर्ष के अंत तक हमारे पास एक वैक्सीन हो सकती है। हमें इसकी उम्मीद है।

विश्व स्वास्थ्य संगठन की कोवैक्सीन

उम्मीद

• विश्व स्वास्थ्य संगठन के प्रमुख ने बैठक में जताई उम्मीद
• कहा- दुनिया में हर 10 में से एक व्यक्ति हो सकता है संक्रमित

परियोजना से दुनिया के 168 देश जुड़ चुके हैं, लेकिन अभी तक अमेरिका, रूस और चीन इस गठबंधन में शामिल नहीं हुए हैं। इसका मकसद वैक्सीन विकास, निर्माण और हर किसी तक इसकी पहुंच बनाने की है। वहाँ डॉ. माइकल रेयरन ने कहा कि दुनियाभर में हर 10 में से एक व्यक्ति कोरोना वायरस से संक्रमित हो सकता है।
Ayurveda (Hindustan: 2020107)

https://epaper.livelyhindustan.com/imageview_361100_85154320_4_1_07-10-2020_4_i_1_sf.html
अश्वगंधा और आयुष-64 कोरोना रोकने में कारगर

उपचार

नई दिल्ली | एजेंटी

केंद्रीय स्वास्थ्य मंत्री हर्षवर्धन ने कोविड-19 के चिकित्सकीय प्रबंधन के लिए आयुष्मान औषधियों और योग आधारित एक प्रोटोकॉल जारी किया। इसमें कोरोना वायरस संक्रमण की रोकने और हलके लक्षणों तथा लक्षणविविध मामलों के उपचार के लिए अश्वगंधा और आयुष-64 जैसी औषधियों शामिल हैं।

हर्षवर्धन ने आयुष्मान मंत्री श्रीपद नारायण की मौजूदगी में कोविड-19 के प्रबंधन के लिए आयुष्मान और योग आधारित राष्ट्रीय चिकित्सकीय प्रबंधन प्रोटोकॉल जारी किया। स्वास्थ्य मंत्री के हवाले से एक बयान में कहा गया, रोग निरोगी कदमों वाला यह प्रोटोकॉल न सिर्फ़ कोविड-19 के प्रबंधन में एक महत्वपूर्ण कदम है, बल्कि आधुनिक समय की समस्याओं के समाधान में पारंपरिक ज्ञान को प्रासंगिक बनाने की दिशा में भी महत्वपूर्ण कदम है। उन्होंने कहा कि दुर्भाग्य से स्वतंत्रता के बाद आयुष्मान पर ज्यादा ध्यान नहीं दिया गया,

कोविड प्रोटोकॉल

- लक्षणविहीन रोगियों के उपचार, बीमारी को लक्षणों तथा गंभीर स्वरूप में तब्दील होने से रोकने तथा ठीक होने की दर में सुधार के लिए गुड़ू का घनवाटी, गुड़ू और पीपली या आयुष-64।
- गुड़ू और पीपली तथा आयुष-64 गोलियां हलके लक्षण वाले कोविड-19 मरीजों को दी जा सकती है।
- दवाओं के साथ सामान्य एवं आहार सम्बन्धी कदमों का भी पालन हो।
- मध्यम स्तर के लक्षणों से लेकर गंभीर लक्षणों वाले लोगों को उपचार विकल्पों के बारे में अवगत होना चाहिए।
- डॉक्टर इस सूची में से अपने चिकित्सकीय निर्णय, उपयुक्तता, उपलब्धता और क्षेत्रीय प्राथमिकताओं के आधार पर दवाओं का चयन करें।
### देश में सात दिनों से लगातार कम हो रहे मामले

#### कोरोना से लड़ाई

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#### संकट साफ, घट रहा संक्रमण

बांग्लादेश की महापीय करेल के कम्प्यूटर राष्ट्रीय निर्देशक जन्मशान ने बताया कि कोरोना के नए संक्रमण में कमी लाभ सकेगी है कि महामारी का प्रकोप घटने लगा है। दक्षिण, जहां लाखों लोगों की फैली हो जा रही है, तब संक्रमित व्यक्तियों की संख्या कम हो रही है। संक्रमित व्यक्तियों का फैला भी कम हो रहा है। हम देख सकते हैं कि करीब 85% लोग स्वस्थ रहे हुए हैं।